



Canyon Fuel
Company, LLC.
Skyline Mine

A Subsidiary of Arch Western Bituminous Group, LLC

Gregg Galecki, Environ. Coordinator
HCR 35, Box 380
Helper, UT 84526
(435) 448-2636 - Office
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April 4, 2006

Ms. Pam Grubaugh-Littig
Permit Supervisor
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, Utah 84114-5801

RE: Modification to Water Monitoring Tables, Canyon Fuel Company, LLC, Skyline Mine,
C/007/005,

Dear Ms. Grubaugh-Littig:

Please find enclosed with this letter modifications to the Skyline Mine Water Monitoring tables 2.3.7-1 through 2.3.7-2A. As has been discussed with Ms. Dean, the focus of the submittal is to ensure the Water Monitoring tables are consistent with both long term commitments in the M&RP, and the analysis reduction modification submitted in 2005. Efforts were also made to make the tables easier to read and understand. A complete 'overhaul' of the tables will be made in the near future that will provide demonstrations to eliminate specific laboratory analysis that are no longer necessary. The future submittal will potentially allow a significant simplification of the tables.

The current submittal includes clarification items such as adding the letter "W" for all winter sampling, the letter "H" for production well sampling, and listing a site twice if two (2) separate sampling frequencies apply. Additionally, typographic errors such as "1, 2" have been modified to "12" where appropriate. No modifications have been made that are not currently supported in the text of the M&RP.

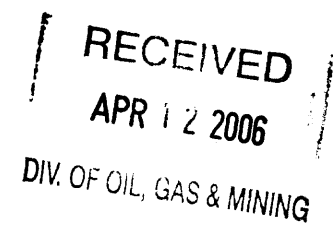
This submittal includes completed C1 and C2 forms and both eight (8) redline/strikethrough and Eight (8) copies of modified text.

If you have any questions, please call me at (435) 448-2636.

Sincerely,

Gregg A. Galecki
Environmental Coordinator, Skyline Mine
Canyon Fuel Company, LLC

enclosures



APPLICATION FOR COAL PERMIT PROCESSING

Permit Change ☒ New Permit ☐ Renewal ☐ Exploration ☐ Bond Release ☐ Transfer ☐

Permittee: Canyon Fuel Company, LLC

Mine: Skyline Mine

Permit Number: C/007/005

Title: North Lease Subsidence Submittal

Description, Include reason for application and timing required to implement:

Modification to the M&RP Water Monitoring Tables - Section 2.3

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- ☐ Yes ☒ No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ ☐ increase ☐ decrease.
- ☐ Yes ☒ No 2. Is the application submitted as a result of a Division Order? DO# _____
- ☐ Yes ☒ No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- ☐ Yes ☒ No 4. Does the application include operations in hydrologic basins other than as currently approved?
- ☐ Yes ☒ No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- ☐ Yes ☒ No 6. Does the application require or include public notice publication?
- ☐ Yes ☒ No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- ☐ Yes ☒ No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- ☐ Yes ☒ No 9. Is the application submitted as a result of a Violation? NOV # _____
- ☐ Yes ☒ No 10. Is the application submitted as a result of other laws or regulations or policies?
- Explain: _____
- ☐ Yes ☒ No 11. Does the application affect the surface landowner or change the post mining land use?
- ☐ Yes ☒ No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- ☐ Yes ☒ No 13. Does the application require or include collection and reporting of any baseline information?
- ☐ Yes ☒ No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- ☐ Yes ☒ No 15. Does the application require or include soil removal, storage or placement?
- ☐ Yes ☒ No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- ☐ Yes ☒ No 17. Does the application require or include construction, modification, or removal of surface facilities?
- ☒ Yes ☐ No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- ☐ Yes ☒ No 19. Does the application require or include certified designs, maps or calculation?
- ☐ Yes ☒ No 20. Does the application require or include subsidence control or monitoring?
- ☐ Yes ☒ No 21. Have reclamation costs for bonding been provided?
- ☐ Yes ☒ No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- ☐ Yes ☒ No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) copies, thank you. (These numbers include a copy for the Price Field Office)

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Wesley K Sorcussen
Print Name

Wesley K Sorcussen 4/4/06
Sign Name, Position, Date

Subscribed and sworn to before me this 4 day of April, 2006

[Signature]
Notary Public

My commission Expires:

Attest: State of Utah 12/2, 2007 } ss:

County of Carbon

For Office Use Only:

Assigned Tracking
Number:

Received by Oil, Gas & Mining

RECEIVED

APR 12 2006

DIV. OF OIL, GAS & MINING

APPLICATION FOR COAL PERMIT PROCESSING

Detailed Schedule Of Changes to the Mining And Reclamation Plan

Permittee: Canyon Fuel Company, LLC

Mine: Skyline Mine

Permit Number: C/007/005

Title: Modification to the M&RP Water Monitoring Tables - Section 2.3

Provide a detailed listing of all changes to the Mining and Reclamation Plan, which is required as a result of this proposed permit application. Individually list all maps and drawings that are added, replaced, or removed from the plan. Include changes to the table of contents, section of the plan, or other information as needed to specifically locate, identify and revise the existing Mining and Reclamation Plan. Include page, section and drawing number as part of the description.

DESCRIPTION OF MAP, TEXT, OR MATERIAL TO BE CHANGED[illegible]

Any other specific or special instruction required for insertion of this proposal into the Mining and Reclamation Plan.

Eight (8) redline/strikethrough and eight (8) clean copies submitted

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Table 2.3.7-1
Comprehensive Water Quality Analytical Schedule
(Surface and Ground Water Stations)

<u>Streams</u>	<u>Protocol</u>	<u>Comments</u>
CS-1	A 12	
CS-3	A 1, 2, 6, 7	
CS-4	A 1, 2, 6, 7	
CS-6	A , A, W, 1, 2, 3, 6, 7, 10	
CS-7 (F-5)	A 12	
CS-8	A 12	
CS-9	A 1, 2, 6, 7	
CS-10	A 12	
CS-11	A 1, 2, 6, 7	
CS-12	A, W, 1, 2, 3, 6, 7	
CS-13	A, W, 1, 2, 3, 6, 7	
CS-14	A, W, 1, 2, 3, 6, 7	
CS-15	A 12 A 10	
CS-16	A 12	
CS-17	A 12	
CS-18	A 12	
CS-19	A 1, 2	
CS-20	A 1, 2	
CS-21	A 1, 2	
CS-22	D 12 10	
CS-23	D 12 10	
MD-1	A 1, 2 , B 4	(Mine discharge - CS-12 and CS-14 combined)
SRD-1	B 10	(Same as MD-1)
F-9	C 12	
F-10	A 1, 2 and C	
UP&L-10	A 1, 2	
VC-6	A , A, W, 1, 2, 3, 6, 7, 9	
VC-9	A , A, W, 1, 2, 3, 6, 7, 8, 9	Flow is sum of CS-6 and CS13
VC10	A , A, W, 12	
VC11	D 10	
VC12	D 10	
MC-1	A , A, W, 4	
MC-2	A , A, W, 4	
MC-3	A , A, W, 4	
MC-4	A , A, W, 4	
MC-5	A , A, W, 4	
MC-6	A , A, W, 4	
NL-1 through NL-40	F 12 10	North Lease Subsidence Points
WRDS #1	A 1, 2, 6, 7	
WRDS #2	A 1, 2, 6, 7	
WRDS #3	A 1, 2, 6, 7	
WRDS #4	A 1, 2, 6, 7	
EL-1	A 13	Sample spring, summer, and fall for
EL-2	A 13	3 years beginning in 2004

Table 2.3.7-1 (cont.)
Comprehensive Water Quality Analytical Schedule
(Surface and Ground Water Stations)

<u>Springs</u>	<u>Protocol</u>	<u>Comments</u>
S10-1	A 1, 2	
S12-1	A 1, 2	
S13-2	A 12	
S13-7	A 1, 2	
S14-4	A 12	
S15-3	A 12, 13 (13 - spring and fall for 3 years starting in 2004)	
S15-3	G 13 (13 - spring and fall for 3 years starting in 2004)	
S17-2	A 1, 2	
S22-5	A 12	
S22-11	A 12	
S23-4	A 12	
S24-1 Sulfur Spring	A 1, 2 , G 13 (13 - spring and fall for 3 years starting in 2004)	
S24-12	A 12	
S26-13	A 12	
S34-12	A 12	
S35-8	A 12	
S36-12	A 12	
2-413	A 12, 13 (13 - spring and fall for 3 years starting in 2004)	
2-413	G 13 (13 - spring and fall for 3 years starting in 2004)	
3-290	A 12	
8-253	G 13	Sampled spring and fall for 3 years starting in 2004
WQ1-39	A 1, 2	
WQ3-6	A 1, 2	
WQ3-26	A 1, 2	
WQ3-41	A 1, 2	
WQ3-43	A 1, 2	
WQ4-12	A 1, 2	
<u>Wells</u>		
JC-1	A 5 and B 3 , H 5	
JC-3	A 4 and B 3 , H 4	
ELD-1	B 10	(JC-1 and JC-3 combined)
W79-10-1B	E 11	
W79-14-2A	E 11	
W79-26-1	E 11	
W79-35-1A	E 11	
W79-35-1B	E 11	
W2-1 (98-2-1)	E 11	
W20-4-1	E 11	
W20-4-2	E 11	
W99-4-1	E 11	
W99-21-1	E 11	
W99-28-1	E 11	
W20-28-1	E 11	
91-26-1	E 11	
91-35-1	E 11	

Table 2.3.7-1 (cont.)
Comprehensive Water Quality Analytical Schedule
(Surface and Ground Water Stations)

Field and Laboratory Measurement Protocol

Water Level and Flow Measurements

- A Stream and Springs: high spring (April - June), low summer flow (August - September), and late fall (October - November)
- ~~A~~^W Stream and Springs: winter season (December - February) monitoring included
- B Stream, Springs, and Wells: monthly discharge measurements, reported in first 7 days following end of month
- C Stream and Springs: monthly flows when accessible.
- D Stream: seasonal discharge measurements (April - June, August - September, October - November)
- E Monitoring well: seasonal water level measurement (April - June, August - September, October - November)
- F Streams: monthly flows June through October, earlier and later if accessible. To be monitored one year prior to, during, and one year following undermining.
- G Springs: high spring and late fall sampling
- H **Production Wells: (Quarterly)**

Water Quality

- 1 High spring and late fall (April - June and October - November) water quality field and operational laboratory measurements
- 2 Low summer flow (August - September) water quality field and operational laboratory measurements
- 3 Winter season (December - February) water quality field and operational laboratory measurements
- 4 Seasonal water quality field measurements, TDS, TSS, and total phosphorous
- 5 Seasonal water quality field measurements, TDS, TSS, and total phosphorous, C14, tritium, and stable isotopes deuterium and oxygen 18
- 6 Also oil and grease, phenols
- 7 Total organic carbon and cyanide (low summer flow only)
- 8 Also total phosphorous
- 9 Also dissolved oxygen
- 10 ~~Seasonal flow~~ **Flow** only
- 11 ~~Seasonal water~~ **Water** levels
- 12 Field parameters only**
- 13 Tritium

** Sites with at least two (2) years of lab analysis data will be sampled once every five (5) years for the currently approved laboratory parameters beginning in 2010. If field parameter monitoring indicates any trending changes, regular laboratory analysis may be resumed until trend is adequately characterized.

Table 2.3.7-2
Water Quality Analytical Schedule
Streams and Springs
High Spring (April - June),
Late Fall (October - November), and
Winter (December - February) Flows

Field Measurements

Flow

pH

Specific Conductance

Temperature, Air

Temperature, Water

Turbidity

Laboratory Measurements

Ammonia

Bicarbonate

Calcium, dissolved

Chloride

Iron, Total ~~and dissolved~~

Magnesium, dissolved

Manganese, total ~~and dissolved~~

Nitrate

Phosphate (Orthophosphate)

Potassium, dissolved

Sodium, dissolved

Sulfate

Suspended Solids

Total Dissolved Solids

Table 2.3.7-2A
Water Quality Analytical Schedule
Streams and Springs
-Low Summer Flow-
(August - September)

Field Measurements

Flow

Dissolved Oxygen

pH

Specific Conductance

Temperature, Air

Temperature, Water

~~Turbidity~~

Laboratory Measurements

Acidity

Alkalinity

Bicarbonate

Ammonia

Barium, Total and dissolved

Boron Total and dissolved

Calcium, dissolved

Chloride

Copper, total and dissolved

Fluoride

Iron, total and dissolved

Lead, total and dissolved

Magnesium, dissolved

Manganese, total and dissolved

Nitrate

Phosphate (Orthophosphate)

Potassium, dissolved

Sodium, dissolved

Sulfate

Suspended Solids

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Table 2.3.7-1
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(Surface and Ground Water Stations)

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CS-14	A, W, 1, 2, 3, 6,7	
CS-15	A 10	
CS-16	A 12	
CS-17	A 12	
CS-18	A 12	
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VC-9	A, W, 1, 2, 3, 6,7,8,9	Flow is sum of CS-6 and CS13
VC10	A, W, 12	
VC11	D 10	
VC12	D 10	
MC-1	A, W, 4	
MC-2	A, W, 4	
MC-3	A, W, 4	
MC-4	A, W, 4	
MC-5	A, W, 4	
MC-6	A, W, 4	
NL-1 through NL-40	F 10	North Lease Subsidence Points
WRDS #1	A 1, 2, 6, 7	
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S13-2	A 12	
S13-7	A 1, 2	
S14-4	A 12	
S15-3	A 12	
S15-3	G 13 (13 - spring and fall for 3 years starting in 2004)	
S17-2	A 1, 2	
S22-5	A 12	
S22-11	A 12	
S23-4	A 12	
S24-1 Sulfur Spring	G 13 (13 - spring and fall for 3 years starting in 2004)	
S24-12	A 12	
S26-13	A 12	
S34-12	A 12	
S35-8	A 12	
S36-12	A 12	
2-413	A 12,	
2-413	G 13 (13 - spring and fall for 3 years starting in 2004)	
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JC-3	B, H 4	
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W79-14-2A	E 11	
W79-26-1	E 11	
W79-35-1A	E 11	
W79-35-1B	E 11	
W2-1 (98-2-1)	E 11	
W20-4-1	E 11	
W20-4-2	E 11	
W99-4-1	E 11	
W99-21-1	E 11	
W99-28-1	E 11	
W20-28-1	E 11	
91-26-1	E 11	
91-35-1	E 11	

Table 2.3.7-1 (cont.)
Comprehensive Water Quality Analytical Schedule
(Surface and Ground Water Stations)

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- 5 Seasonal water quality field measurements, TDS, TSS, and total phosphorous, C14, tritium, and stable isotopes deuterium and oxygen 18
- 6 Also oil and grease, phenols
- 7 Total organic carbon and cyanide (low summer flow only)
- 8 Also total phosphorous
- 9 Also dissolved oxygen
- 10 Flow only
- 11 Water levels
- 12 Field parameters only**
- 13 Tritium

** Sites with at least two (2) years of lab analysis data will be sampled once every five (5) years for the currently approved laboratory parameters beginning in 2010. If field parameter monitoring indicates any trending changes, regular laboratory analysis may be resumed until trend is adequately characterized.

Table 2.3.7-2
Water Quality Analytical Schedule
Streams and Springs
High Spring (April - June),
Late Fall (October - November), and
Winter (December - February) Flows

Field Measurements

Flow

pH

Specific Conductance

Temperature, Air

Temperature, Water

Laboratory Measurements

Ammonia

Bicarbonate

Calcium, dissolved

Chloride

Iron, Total

Magnesium, dissolved

Manganese, Total

Nitrate

Phosphate (Orthophosphate)

Potassium, dissolved

Sodium, dissolved

Sulfate

Suspended Solids

Total Dissolved Solids

Table 2.3.7-2A
Water Quality Analytical Schedule
Streams and Springs
-Low Summer Flow-
(August - September)

Field Measurements

Flow

Dissolved Oxygen

pH

Specific Conductance

Temperature, Air

Temperature, Water

Laboratory Measurements

Acidity

Alkalinity

Bicarbonate

Ammonia

Barium, Total and dissolved

Boron Total and dissolved

Calcium, dissolved

Chloride

Copper, total and dissolved

Fluoride

Iron, total and dissolved

Lead, total and dissolved

Magnesium, dissolved

Manganese, total and dissolved

Nitrate

Phosphate (Orthophosphate)

Potassium, dissolved

Sodium, dissolved

Sulfate

Suspended Solids

Total Dissolved Solids